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EXAMINER

PICH, PONNOREAY

ART UNIT PAPER NUMBER

2135

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,299

Applicant(s)

XYDIS, THOMAS G.

Examiner

Ponnoreay Pich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/25/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-14 have been examined and are pending.

Priority

The examiner recognizes the applicant's right to an earlier effective filing date of 11/29/2000.

Information Disclosure Statement

The IDS submitted by the applicant has been considered.

Drawings

The examiner notes that the applicant submitted new corrected drawings on 2/11/2002. All examinations by the examiner will refer to these drawings.

The drawings are objected to because in Figure 4, the access point shows a part number 44. On page 6, paragraph 0019, lines 1-3, part number 44 is disclosed by the applicant as being the power supply for the second electronic device. The examiner assumes the applicant meant for what is currently labeled as part number 44 in the diagram of the access point to be part number 30 instead, which is disclosed as being the power supply for the access point in paragraph 0018. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary,

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the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

1. On page 6, paragraph 0021, line 1, "Figure 1" should be changed to "Figure 5."
2. On page 12, paragraph 0031, line 3 refers to a hardwire link 52, which does not exist in any of the drawings. The examiner believes that the applicant meant to recite hardwire link 22.
3. On page 12, paragraph 0031, line 7 refers to hardwire links 50. As labeled in the drawings currently, item 50 is the RF signal from the second device. The examiner believes the applicant meant to recite hardwire links 22.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Curtis et al (US 5,963,599).

Claim 1:

Curtis discloses a method of securing access to a network, the network including at least one first electronic device and at least one access point (Fig 5A, item 16 and station 1W), from a user having a second electronic device (Fig 5A, station nW), said method comprising:

1. Transmitting a radio frequency (RF) signal from the first electronic device (Fig 5A and col 8, lines 8-13).
2. Detecting the RF signal from the first electronic device with the access point (Fig 5A and col 8, lines 8-13).
3. Transmitting a radio frequency (RF) signal from the second electronic device (Fig 5A).
4. Detecting the RF signal from the second electronic device with the same access point (Fig 5A).
5. Enabling the first electronic device to allow the user having the second electronic device to access the network and the first electronic device in response to the access point detecting the RF signals from the first and the second electronic devices (col 7, line 63-col 8, line 13).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) and in view of Meier (US 5,673,031).

Claim 2:

Curtis do not disclose the steps of measuring a signal strength for the RF signals from both the first and the second electronic devices, comparing the signal strengths to a predetermined threshold, and enabling the first electronic device in response to both of the signal strengths being above the predetermined threshold.

However, Curtis discloses an access point configured to detect RF signals from a nearby device (Fig 5A and col 8, lines 8-13). Also, Meier discloses detecting signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station—i.e. an access point (col 5, lines 13-26). Note that although Meier does not teach that the RF signals from the mobile unit is measured against a threshold value, because Meier discloses the concept of measuring the strength of an RF signal, it would be obvious to one of ordinary skill to measure the signal strength from either the mobile unit or the base unit (i.e. access point). The choice of having either the mobile

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unit/electronic device or base unit/access point decide whether to enable a connection based on the signal strength is arbitrary. If one of ordinary skill decides to have the mobile unit decide whether a connection should be made, then it is obvious that the mobile unit would need to detect and measure the signal strength from the base unit. If one of ordinary skill decides that the base unit should decide whether to enable a connection, then it is obvious that the base unit need to detect and measure the signal strength from the mobile units. In most wireless networks, both the mobile unit and the base unit each detect an RF signal and make a decision.

It would have been obvious to one of ordinary skill at the time the applicant's invention was made in light of Meier's teachings to modify Curtis's method according to the limitation recited in claim 2. One of ordinary skill would have been motivated to do so as Meier's teachings allows for the connection of an electronic device to an access point with the strongest signal strength (col 5, lines 20-26). A strong signal coming from a specific access point to a mobile electronic device means that a strong signal from the mobile device must also go to the specific access point. A stronger signal between an access point and an electronic device usually means more reliable and faster communication between an electronic device, the access point, and any other devices attached to the access point.

Claim 3:

Curtis and Meier do not explicitly disclose the step of disabling the first electronic device in response to either one of the signal strengths from the first electronic device

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and the second electronic devices being measured below the predetermined threshold by the access point.

However, as mentioned in claim 2, Meier teaches only considering RF signals that are above a certain predetermined threshold (col 5, lines 8-20). Meier also discloses re-evaluating the base station/access point that an electronic device is connected to based on re-evaluating RF signal strength (col 5, line 66-col 6, line11).

The examiner has interpreted the phrase "disabling the first electronic device" to include disconnecting the either the first or second electronic device from the access point as doing so would effectively disable the connection of the first and second electronic device and the second device is no longer able to connect to the first. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to in light of the above teachings of Meier to further modify the combination method of Curtis and Meier according to the limitations recited in claim 3. It would have been obvious because Meier's teachings show that the connection of the first and second electronic device to an access point could be evaluated based on the RF signal strength. As the signal strength of either the first or second device falls below a certain threshold, Meier teaches that the device should re-evaluate its connection to the access point and consider attaching to a different access point instead. Should either device do so, the information contained in the first device is not longer accessible to the second device as they would no longer be communicating via the same access point and thus the first device's ability to communicate with the second device is

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effectively disabled especially if there was not another access point around for the two devices to connect to.

Claim 4:

Curtis disclose the step of transmitting data from either one of the first and the second electronic device to the access point and routing data from the access point to the other electronic device (Fig 5A, and col 8, lines 8-13).

Claim 5:

Curtis discloses the step of activating either one of the first and the second electronic device to transmit the data directly to the other in response to instructions from the access point thereby bypassing the access point (Fig 5B and col 8, lines 8-13).

Claim 7:

Curtis does not explicitly disclose the steps of detecting the RF signals from the first and the second electronic devices by a different access point, measuring the RF signal strengths at the different access point, and re-enabling the first electronic device in response to the RF signals from the first and the second electronic device being above the predetermined threshold.

However, Meier discloses detecting signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station--i.e. an access point (col 5, lines 13-26). Meier also discloses re-evaluating the base station/access point that an electronic

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device is connected to based on re-evaluating RF signal strength and connecting to a different base station or access point (col 5, line 66-col 6, line11).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made in light of Meier's teachings to further modify the combination method of Curtis and Meier according to the limitations recited in claim 7. One of ordinary skill would have been motivated to do so as Meier's teachings allows for the connection of an electronic device to an access point with the strongest signal strength once one becomes available (col 5, lines 20-26). A stronger signal means more reliable communications between the devices.

Claim 10:

Curtis discloses a method of securing access to a network, the network including at least one first electronic device (Fig 5A, item 16 and station 1W), from a user having a second electronic device (Fig 5A, station nW), said method comprising the steps of:

1. Transmitting a radio frequency signal from the second electronic device to establish communication with at least one access point (Fig 5A and col 8, lines 8-13).
2. Detecting the RF signal from the second electronic device with an access point (Fig 5A and col 8, lines 8-13).
3. Said method characterized by transmitting data from the second device through the access point to the predetermined number of first electronic devices thereby establishing communication between the first electronic devices and the second electronic device (Fig 5A and col 8, lines 8-13).

Curtis does not explicitly disclose:

1. Measuring the strength of the RF signal from the second electric device **at the first and second access points**.
2. Comparing a maximum measured RF signal strength by either of the first and second access points to determine a predetermined threshold.
3. Enabling a predetermined number of first electronic devices in response to the detected RF signal strength being above the predetermined threshold.
4. Said method characterized by transmitting data from the second device through the access point **which measures the maximum RF signal strength**.

However, Meier discloses detecting and measuring signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using RF signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station--i.e. an access point (col 5, lines 13-26). Meier also discloses re-evaluating the base station/access point that an electronic device is connected to based on re-evaluating RF signal strength (col 5, line 66-col 6, line11). This teaches the use of multiple access points.

In light of Meier's teachings, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Curtis's method according to the limitations recited in claim 10. One of ordinary skill would have been motivated to do so for the same reasons given in claim 2.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of Meier (US 5,673,031) and further in view of van Bokhorst et al (US 6,192,230).

Claim 6:

Curtis and Meier do not disclose the step of activating either one is further defined as transmitting timing intervals from the access point to either one of the first and the second electronic devices and activation the one during the timing intervals to detect the other. However, van Bokhorst discloses a wireless network wherein synchronizing messages and traffic indicator information are broadcasted to stations (i.e. electronic devices) which are identified to stay awake for a time period to receive one or more data messages (col 1, line 57-col 2, line 6). In light of van Bokhorst's teachings, it would have been obvious to one of ordinary skill in the art to further modify Curtis and Meier's combination method according to the limitation recited in claim 6. One of ordinary skill would have been motivated to do so as van Bokhorst discloses that his teachings would allow for a wireless communication system/network to have a power saving function (col 1, lines 53-56).

Claims 8-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) and in view of Meier (US 5,673,031) and further in view of Stewart (US 5,969,678).

Claim 8:

Curtis does not explicitly disclose the step of loading user data into each of the access points in response to at least one access point measuring the RF signal from the second electronic device being above the predetermined threshold.

However, as discussed already, Meier discloses detecting signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station—i.e. an access point (col 5, lines 13-26). Meier also discloses re-evaluating the base station/access point that an electronic device is connected to based on re-evaluating RF signal strength and connecting to a different base station (col 5, line 66-col 6, line 11). Also, Stewart discloses the step of loading user data (i.e. identification code) into each of the access points (col 3, lines 57-65).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify the combination method of Curtis and Meier according to the limitation recited in claim 8 in light of Meier and Stewart's teachings. One of ordinary skill would have been motivated to incorporate Stewart's teachings because Stewart discloses his teachings would allow recognition of a user before providing access to system services, thereby providing a measure of security

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(col 3, lines 62-65). One of ordinary skill would have been motivated to incorporate Meier's teachings for the same reasons given in claim 7.

Claim 9:

Curtis does not disclose the step of synchronizing the user data from the different access points to the first electronic device in response to the RF signal from the second electronic device being above the predetermined threshold at the different access point. However, Stewart discloses the step of synchronizing the user data from the different access points to the first electronic device (col 6, lines 29-39). Stewart does not disclose said step being done in response to the RF signal from the second electronic device being above the predetermined threshold at the different access points.

However, it has been discussed already how Meier discloses detecting the RF signal strength in a wireless network and only doing something if the RF signal strength is above a certain threshold (col 5, lines 13-26). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify the combination method of Curtis, Meier, and Stewart in light of Stewart and Meier's teachings according to the limitations recited in claim 9. One of ordinary skill would have been motivated to do so for the same reasons given in claim 8.

Claim 11:

Curtis does not disclose the step of loading user data into the first and the second access point in response to the RF signal from the second electronic device being above the predetermined threshold at either of the first and the second access points.

However, as discussed in claim 10, Meier discloses detecting and measuring signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using RF signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station—i.e. an access point (col 5, lines 13-26). Further, Stewart discloses the step of loading user data (i.e. identification code) into the first and the second access points (col 3, lines 57-65). Note that although Stewart discloses in the cited passage that the user data is loaded onto only access point 10, since Stewart discloses more than one access point being used (col 8, lines 45-57), should a mobile unit be near two access point, then it is obvious that the user data is loaded into the first and second access points. Stewart also does not disclose the loading is done in response to the RF signal from the second electronic device being above the predetermined threshold at either of the first and the second access points.

In light of the above teachings by Meier and Stewart, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify Curtis and Meier's combination method according to the limitations recited in claim 11. One of ordinary skill would have been motivated to incorporate the teachings of Meier for the same reasons given in claim 2. One of ordinary skills would have been motivated to incorporate Stewart's teachings for the same reasons given in claim 8.

Claim 12:

Curtis do disclose the step of transferring communication to one of the first and second access points in response to the RF signal strength at the other access point falling below the predetermined threshold.

However, Meier discloses re-evaluating the RF signal strength every so often and switching connection of a mobile unit (electronic device) to a different base station (access point) once the RF signal declines (col 6, lines 1-11).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify the combination method of Curtis, Stewart, and Meier according to the limitations recited in claim 12 in light of Meier's teachings. One of ordinary skill would have been motivated to do so for the same reasons given in claim 2.

Claim 13:

Curtis, Meier, and Stewart do not explicitly disclose the step of disabling the first electronic devices in response to the RF signal strength from the second electronic device being measured below the predetermined threshold at both the first and second access point.

However, Meier discloses detecting and measuring signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using RF signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station--i.e. an access point (col 5, lines 13-26). The examiner has also interpreted the phrase “disabling the first electronic devices” to include just disconnecting either the first electronic devices from

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both the first and second access point or disconnecting the second electronic device from the first and second access point. Doing so would effectively disable the connection between the first and second electronic devices. Further, since Meier discloses only considering RF signal strengths that meet a minimum threshold, it would be obvious to one of ordinary skill that if the signal strength no longer has that minimum threshold, to no longer consider that RF signal and the device which emits that signal. As such, should the RF signal from the second electronic device fall below a threshold at both the first and second access point, then it would be obvious to one of ordinary skill to disconnect the second device from both access point.

In light of the above, it would have been obvious to one of ordinary skill at the time the applicant's invention was made to further modify Curtis, Meier, and Stewart's combination method according to the limitation recited in claim 13. One of ordinary skill would have done so for the same reasons given in claim 2.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of Meier (US 5,673,031) and Stewart (US 5,969,678) and further in view of common practice in the art.

Claim 14:

Curtis, Meier, and Stewart do not explicitly disclose removing the user data from the first and second access points in response to the RF signal strength falling below the predetermined threshold at the first and second access points. However, it is common practice in the art of networking to not keep user data once a user has

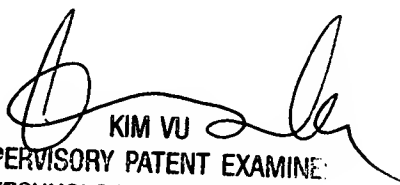
disconnected for security purposes. For example, when a user closes a browser, user data such as passwords and user id's to websites they have logged into do not get retained unless the user specifically chose to have the system do so. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify the combination method of Curtis, Meier, and Stewart according to the limitation recited in claim 14 in light of common practice in the art. One of ordinary skill would have done so because requiring a user to log in again after they have been disconnected would increase security for a system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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